

WHAT IS CLAIMED IS:

1. A passenger detector for detecting a passenger occupying a seat of an automotive vehicle, the passenger detector comprising:

a load sensor for detecting a load imposed on the seat;

a memory for storing at least one threshold load, the memory including a rewritable non-volatile memory; and

means for determining occupancy or unoccupancy of the seat by comparing the load detected by the load sensor with the memorized threshold load.

2. The passenger detector as in claim 1, wherein:

data stored in the rewritable non-volatile memory are renewable by communication with an outside device.

3. The passenger detector as in claim 2, wherein:

the threshold load includes data for determining a passenger type according to his/her weight.

4. The passenger detector as in claim 2, wherein:

the threshold load includes data for determining unoccupancy of the seat.

5. The passenger detector as in claim 2, wherein:

the memory further includes a read-only-memory;

the read-only-memory stores design-target threshold loads and the rewritable non-volatile memory stores adjustment loads for adjusting the design-target threshold loads; and

the adjusted threshold loads, which are obtained by adjusting the design-target threshold loads with the adjustment loads, are used for determining occupancy or unoccupancy of the seat.

6. The passenger detector as in claim 5, wherein:

the rewritable non-volatile memory further stores a flag indicating that the adjustment loads have been stored or rewritten.

7. A method of adjusting a passenger detector for detecting a passenger occupying a seat of an automotive vehicle, the passenger detector including a load sensor for detecting a load imposed on the seat and a memory for storing a threshold load for determining occupancy or unoccupancy of the seat by comparing the load detected by the load sensor with the threshold load stored in the memory, the method comprising steps to be carried out in the following order:

installing the passenger detector in the seat;

placing a known load on the seat;

measuring the known load by the load sensor to thereby obtain a detected load; and

adjusting the threshold load stored in the memory using the detected load.

8. The method of adjusting a passenger detector as in claim 7, the method further including a step of mounting the seat in which the passenger detector is installed on the automotive vehicle, this step being carried before the step of placing the known load on the seat.

9. The method of adjusting a passenger detector as in claim 7, wherein:

the threshold load stored in the memory includes data for determining a passenger type according to his/her weight;

the known load placed on the seat is a load corresponding to a design-target threshold load; and

the threshold load is adjusted based on a result of measuring the known load.

10. The method of adjusting a passenger detector as in claim 9, wherein:

the threshold load stored in the memory further includes data for determining unoccupancy of the seat; and

the data for determining unoccupancy of the seat is adjusted based on a load detected by the load sensor without placing any load on the seat.

11. The method of adjusting a passenger detector as in claim 7, wherein:

the memory includes a rewritable non-volatile memory; and

the adjustment of the threshold load is carried out by rewriting data stored in the rewritable non-volatile memory.

12. The method of adjusting a passenger detector as in claim 11, wherein:

the data stored in the rewritable non-volatile memory are rewritten through communication between the passenger detector and an outside device.

13. The method of adjusting a passenger detector as in claim 11, wherein:

the memory further includes a read-only-memory in which a design-target threshold load is stored; and

a difference between the load detected by the load sensor by measuring the known load and the design-target threshold load is written in the rewritable non-volatile memory, thereby adjusting the design-target load with the difference.

14. The method of adjusting a passenger detector as in claim 13, wherein:

the rewritable non-volatile memory further stores a flag indicating that the difference for adjustment has been written in the rewritable non-volatile memory.